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Application No. 10/084,573
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Amendments to the Claims:

By the present amendment, claims 20, 22, and 35-36 are amended and claim 38 is added. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

Claim 1. (Previously presented) A laminate for use as a battery housing, comprising:

- (a) a sealant layer that is capable of acting as a barrier to an electrolyte, the sealant layer having an internal surface that is substantially inert to the electrolyte and an external surface;
- (b) a barrier layer comprising a first layer of metal foil and a second layer of metal foil adjacent to the first layer, the first and second layers of metal foil being separate and distinct, and the barrier layer having a first surface disposed adjacent to the external surface of the sealant layer and an external surface.

Claim 2. (Original) The laminate of claim 1, further comprising a layer of adhesive material between at least one pair of layers selected from the first and the second layers of metal foil and the sealant layer and the first layer of metal foil.

Claim 3. (Original) The laminate of claim 1 wherein the first and second layers of metal foil comprise aluminum foil.

Claim 4. (Original) The laminate of claim 1 wherein the first layer and the second layer of metal foil each have a thickness of between 6 micrometers and 120 micrometers.

Claim 5. (Original) The laminate of claim 1 wherein the sealant layer is a polymer.

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Claim 6. (Original) The laminate of claim 5 wherein the sealant layer is selected from the group consisting of polyesters, polyamides, polyvinylchlorides, fluoroplastics, and polyolefins.

Claim 7. (Original) The laminate of claim 5 wherein the polymer is selected from the group consisting of low density polyethylene, high density polyethylene, medium density polyethylene, linear low density polyethylene (LLDPE), two-ply high density polyethylene/linear low density polyethylene, ethylene interpolymers, polyethylene terephthalate, polypropylene, polychloro-trifluoroethylene, polyphenylene sulfide, ethylene vinyl acetate, ethylene vinyl alcohol, nitrile resin films, nylon, rubber, and combinations thereof.

Claim 8. (Previously Presented) The laminate of claim 1, further comprising a protective layer having a surface disposed adjacent to the external surface of the barrier layer.

Claim 9. (Original) The laminate of claim 8 wherein the protective layer is a polymer.

Claim 10. (Original) The laminate of claim 9 wherein the protective layer is selected from the group consisting of polyesters, polyamides, polyvinylchlorides, fluoroplastics, polyacrylonitrile, and polyolefins.

Claim 11. (Original) The laminate of claim 9 wherein the polymer is selected from the group consisting of low density polyethylene, high density polyethylene, medium density polyethylene, linear low density polyethylene (LLDPE), two-ply high density polyethylene/linear low density polyethylene, ethylene interpolymers, polyethylene terephthalate, polypropylene, polyacrylonitrile, polychloro-trifluoroethylene, polyphenylene sulfide, ethylene vinyl acetate, ethylene vinyl alcohol, nitrile resin films, nylon, rubber, and combinations thereof.

Claim 12. (Original) The laminate of claim 1 wherein sealant layer contains an absorbent material.

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Claim 13. (Original) The laminate of claim 12 wherein the absorbent material is selected from the group consisting of molecular sieves, magnesium phosphate, calcium sulfate, silica gel, clays, activated charcoal, activated alumina, water absorbent resins, titanium oxide, zirconium oxide, calcium oxide, and combinations thereof.

Claim 14. (Original) The laminate of claim 2 wherein the adhesive contains an absorbent material.

Claim 15. (Original) The laminate of claim 14 wherein the absorbent material is selected from the group consisting of molecular sieves, magnesium phosphate, calcium sulfate, silica gel, clays, activated charcoal, activated alumina, water absorbent resins, titanium oxide, zirconium oxide, calcium oxide, and combinations thereof.

Claim 16. (Original) The laminate of claim 8 wherein the protective layer contains an absorbent material.

Claim 17. (Original) The laminate of claim 16 wherein the absorbent material is selected from the group consisting of molecular sieves, magnesium phosphate, calcium sulfate, silica gel, clays, activated charcoal, activated alumina, water absorbent resins, titanium oxide, zirconium oxide, calcium oxide, and combinations thereof.

Claim 18. (Original) The laminate of claim 1, further comprising an absorbent material coated onto the internal surface of the sealant layer.

Claim 19. (Original) The laminate of claim 18 wherein the absorbent material is selected from the group consisting of molecular sieves, magnesium phosphate, calcium sulfate, silica gel, clays, activated charcoal, activated alumina, water absorbent resins, titanium oxide, zirconium oxide, calcium oxide, and combinations thereof.

Claim 20. (Currently amended) A laminate for use as a battery housing, comprising:

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(a) a sealant layer that is capable of acting as a barrier to an electrolyte, the sealant layer having an internal surface that is substantially inert to the electrolyte and an external surface;

(b) an absorbent material pattern printed as dots on the internal surface of the sealant layer, ~~wherein the absorbent material is a moisture absorbent selected from the group consisting of molecular sieves, magnesium phosphate, activated charcoal, and combinations thereof.~~

Claim 21. (Canceled)

Claim 22. (Currently amended) The laminate of claim 20 A laminate for use as a battery housing, comprising:

(a) a sealant layer that is capable of acting as a barrier to an electrolyte, the sealant layer having an internal surface that is substantially inert to the electrolyte and an external surface;

(b) an absorbent material pattern printed on the internal surface of the sealant layer, wherein the absorbent material is a hydrofluoric acid absorbent selected from the group consisting of activated alumina, activated charcoal, molecular sieves, clays, titanium oxide, zirconium oxide, calcium oxide, and combinations thereof.

Claim 23. (Original) The laminate of claim 20 wherein the sealant layer contains an absorbent material.

Claim 24. (Original) The laminate of claim 20 further comprising a barrier layer characterized by an internal surface that is disposed adjacent to the external surface of the sealant layer and an external surface.

Claim 25. (Original) The laminate of claim 24 wherein the barrier layer contains an absorbent material.

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Claim 26. (Original) The laminate of claim 24, further comprising an adhesive material between the sealant layer and the barrier layer.

Claim 27. (Original) The laminate of claim 26 wherein the adhesive material contains an absorbent material.

Claim 28. (Original) The laminate of claim 24, further comprising a protective layer characterized by an internal surface that is disposed adjacent to the external surface of the barrier layer and an external surface.

Claim 29. (Original) The laminate of claim 28 wherein the protective layer contains an adhesive material.

Claim 30. (Original) The laminate of claim 28, further comprising an adhesive material between the protective layer and the barrier layer.

Claim 31. (Original) The laminate of claim 30 wherein the adhesive material contains an absorbent material.

Claim 32-34. (Canceled)

Claim 35. (Currently Amended) The laminate of claim 20 wherein the absorbent material is ~~molecular sieves~~ a moisture absorbent selected from the group consisting of molecular sieves, magnesium phosphate, calcium sulfate, silica gel, activated charcoal, water absorbent resins, and combinations thereof.

Claim 36. (Currently Amended) A laminate for use as a battery housing, comprising:
(a) a sealant layer that is capable of acting as a barrier to an electrolyte, the sealant layer having an internal surface that is substantially inert to the electrolyte and an external surface;

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(b) a barrier layer comprising a first layer of metal foil and a second layer of metal foil attached to the first layer by an adhesive layer a polymeric adhesive layer, the barrier layer having a first surface disposed adjacent to the external surface of the sealant layer and an external surface.

37. (Previously Presented) The laminate of claim 36 wherein the first and second layers of metal foil comprise aluminum foil.

38. (New) The laminate of claim 36 wherein the polymeric adhesive layer contains an absorbent material.